

## **„Fauna Lepidopterologica Volgo-Uralensis“ 150 years later:**

### **Changes and additions.**

#### **Part 12. Ethmiidae et Scythrididae**

(Insecta, Lepidoptera)

by

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**Summary:** 15 species of the Ethmiidae and 46 of the Scythrididae are listed for the modern Volgo-Ural fauna. 56 species are recorded from the region in addition to EVERSMAHN's list of 1844. A distribution of most species of Ethmiidae in the Region is shown on maps.

**Introduction:** This paper is the 12<sup>th</sup> in a series of publications<sup>1</sup>, dealing with the composition of the present-day fauna of Ethmiidae and Scythrididae in the Middle Volga and the south-western Cisurals. This region comprises of the administrative divisions of Astrakhan-, Volgograd-, Saratov-, Samara-, Uljanovsk-, Orenburg-, Uralsk- and Atyraus(=Gurjev) Districts, together with Tataria and Bashkiria. As was accepted in previous parts of this series, only material reliably labelled and spanning the last 25-50 years was used for this study. The main collections are those of the authors: V. ANIKIN (Saratov and Astrakhan Distr. and Kalmyk Republic), S. SACHKOV (Samara Distr.) and V. ZOLOTUHN (Uljanovsk and Astrakhan Distr.). All the data from the XIX and early XX Centuries was taken into account but only as a reference (PALLAS, 1771; REBEL, 1901; KRULIKOWSKY, 1908; KRULIKOWSKY, 1915; see also other parts of the cycle). Whilst completing this list we also took advantage of the information from recent papers on this region (NUPPONEN et al, 2000; SACHKOV, 1998, 1999, 2000a, 2000b, 2002, 2004, 2005; SACHKOV et al., 1996 and others) and from taxonomic monographs – on ethmidids (SÄTTLER, 1967) and on scythridid moths (BENGTSSON, 1997) which were partly critically reviewed and revised. The material in the collections of the Zoological Institute of the Russian Academy of Sciences at St. Petersburg and partly of the Moscow State University have also been examined for our study. Also the private collections of V. KUPAYEV (Samara) and D. D. KOMAROV (Volgograd) were studied and some material on scythridid and ethmiid moths was collected and kindly put at our disposal by T. TROFIMOVA from Bashkiria and Orenburg District, to whom we express our sincere thanks.

We also owe special thanks to the curator of the Lepidopteran collection at the Zoological Museum of the Russian Academy of Science Dr. S. YU. SINEV (St. Petersburg) for a help in our work with the museum funds and consultations on all stages of the work and Dr. Andras KUN (Budapest) for valuable taxonomic consultations.

<sup>1</sup>This series was started in Atalanta 24: 89-120 (1993)

In the text we follow systems proposed by B. BENGTSSON (1997) for Scythrididae with additions made by S. Sachkov for species newly described and by T. RIEDL (1996) for Ethmiidae. The list of food plants are taken from the works cited if not specially pointed.

For the ease of use, information is given in the form of a table, with the principal data of all species mentioned from the Volgo-Ural region. Many localities have been renamed during the last 150 years, the most important ones being listed below:

Uralsk - later Chkalov - now Uralsk  
Samara - later Kujbyshev - now Samara  
Simbirsk - now Uljanovsk  
Sarepta - now Krasnoarmejsk of the Volgograd District  
Waskuntschatskoi - usually noted as Baskunchak (Astrakhan District)  
Tarizyn or Tsarizyn - later Stalingrad - now Volgograd.

Note: Spassk, usually interpreted as EVERSMAAN's estate not far from Orenburg, really might be also a town that disappeared under the Volga's water during the erection of the hydroelectrostations and the following increasing of waters area. Before that Spassk had been situated in about 82 km ESE Kasan on the left bank of Volga.

Notes on the table:

**column 1:** Species number

- species is deleted from the list

**column 2:** Species name

**column 3:** Species listed by EVERSMAAN (1844) within the regional limits of that territory

**column 4 - 10:** Administrative units

4 Astrakhan District (centre is Astrakhan)

5 Volgograd district (Volgograd)

6 Saratov district (Saratov)

7 Samara district (Samara)

8 Uljanovsk district (Uljanovsk)

9 Bashkiria (Ufa)

10 Uralsk district (Uralsk)

+ species is present

- species not found during this study

? species is known from old or doubtful data

o type locality

**column 11:** Flight periods

IV -XI - months

b, m, e - beginning, middle, end of month

1 (2) G - species develops 1 (2) generation(s)

W - winter hibernation

**column 12:** Comments and larval foodplants

L: larval hostplants, \*indicating original data

TL: type locality

E: EVERSMAAN

Species	E A V S S U B U V S O A A L A R E T L R M J S A R R G A A A H L S A O T R N K S Flight M K G O A O I K period A H R V V R N A A S I N N D K A											Comments	
	1	2	3	4	5	6	7	8	9	11	12		
	ETHMIIIDAE												
	1	<i>Ethmia vittalbella</i> CHRISTOPH, 1877	-	-	-	+	-	-	-	-	eVI in 1G		Very rare in steppe biotopes. TL: "Tura" L.: unknown.
	2	<i>Ethmia dodeceea</i> (HAWORTH, 1828) (=decemguttella HÜBNER, [1810]) Map 1	-	+	+	+	+	+	-	-	VI-VII in 1G		Not common in forest-steppe biotopes, edges and forest glades. L.: <i>Lithospermum officinale</i> .
	3	<i>Ethmia quadrillella</i> (GOEZE, 1783) (=funerella FABRICIUS, 1787) Map 2	-	-	+	-	-	+	+	-	mVI- VII in 1G		Not rare but local in various biotopes (from wet meadows to dry steppes). L.: <i>Symphytum officinale</i> , <i>Pulmonaria obscura</i> , <i>Lithospermum officinale</i> , <i>My- osotis</i> .
	4	<i>Ethmia fumidella</i> (WOCKE, 1850)	-	-	-	-	-	-	-	-	?		Noted by KRULIKOWSKY (1908) from Kazan. We have no fresh material, but its finding here is high possible. L.: unknown.
5	<i>Ethmia candidella</i> (ALPHÉRAKY, 1908) Map 2	-	+	+	-	-	-	-	-	mVIII- IX in 1G?	Very rare in dry and sandy steppes. TL: [Taganrog]. L.: <i>Lithospermum purpureo- caeruleum</i> , <i>Cerinth major</i> , <i>Borago officinalis</i> , <i>Asperugo procumbens</i> , <i>Echium pustu- latum</i> .		
6	<i>Ethmia pusiella</i> (LINNAEUS, 1758) Map 3	+	-	-	+	+	+	+	+	? VII- bVIII in 1G	Was cited by E. as <i>Ypome- neuta Lithospermella</i> . Rare and very local in forest- steppes, dry coniferous for- ests and mixed forests near the water. L.: <i>Lithospermum officinale</i> , <i>Pulmonaria</i> , <i>Borago offici- nalis</i> , <i>Cerinth major</i> , <i>Aspe- rugo procumbens</i> , <i>Echium</i>		

											<i>pustulatum</i> , <i>Symphytum officinale</i> .
7	<i>Ethmia aurifluella</i> (HÜBNER, [1810]) Map 4	+	-	+	+	-	+	-	+	V-mVI in 1G	Local but not rare. Steppes with chalk revealing. L.: <i>Thalictrum aquilegifolium</i> , <i>Anchusa</i> .
8	<i>Ethmia lugubris</i> (STAUDINGER, 1879) Map 5	-	-	-	-	+	+	-	-	eVI in 1G	Rare and very local in mixed forest near the water. L.: <i>Symphytum officinale</i> .
9	<i>Ethmia quadripunctella</i> EVERSMANN, 1844 Map 5	+	-	+	+	-	-	-	o	VI in 1G	Was listed by E. as <i>Ypome-neuta</i> with LT: "in promontoriis Uralensibus" L.: unknown.
10	<i>Ethmia pyrausta</i> (PALLAS, 1771) Map 6	-	-	-	-	o	+	-	-	eIV- bV in 1G	Not rare but very local in steppes on chalk and calcareous revealing. LT: Samara. L.: <i>Thalictrum aquilegifolium</i> .
11	<i>Ethmia discrepita</i> REBEL, 1901 Map 6	-	-	-	+	-	-	-	-	V in 1G	We have fresh material from Orenburg Region also. LT: Orenburg. L.: unknown.
12	<i>Ethmia bipunctella</i> (FABRICIUS, 1775) (= <i>echiella</i> ([DENIS & SCHIFFERMÜLLER], 1775)) Map 7	+	-	+	+	+	+	+	?	mV- VII in ?2G	Was listed by E. as <i>Ypome-neuta Echiella</i> . Most common species, in various biotopes. L.: <i>Echium</i> , <i>Symphytum officinale</i> , <i>Cynoglossum officinale</i> , <i>Lithospermum officinale</i> .
13	<i>Ethmia chrysopyga</i> (ZELLER, 1844) Map 8	-	-	-	-	-	-	+	-	eV in 1G	Very rare and local in the stoned steppes. L.: unknown.
14	<i>Ethmia haemorrhoidella</i> (EVERSMANN, 1844) Map 8	+	-	?	+	-	-	-	-	?	Was listed by E. as <i>Ypome-neuta</i> with LT: "ad Volgam inferiorem" Noted by REBEL (1901) from Sarepta. L.: unknown.
15	<i>Ethmia chrysopygella</i> (KOLENATI, 1846) (= <i>flavitibiella</i> HERRICH- SCHÄFFER, 1855; = <i>flavianella</i> EVERSMANN, 1844, nec TREITSCHKE, 1832) Map 3	+	+	-	-	-	-	-	?	V in 1G	Very rare and local in opened biotopes. Is known also after data of E. "volat in promontoriis Uralensibus" L.: <i>Thalictrum</i> .
		6	3	7	8	5	7	4	5		
SCYTHRIDIDAE											
1	<i>Scythris cuspidella</i> ([DENIS & SCHIFFERMÜLLER], 1775)	-	-	-	-	-	-	-	-	VI-VII in 1G	Noted by KRULIKOWSKY (1908) from Kazan and by KLEPIKOV (1999) for

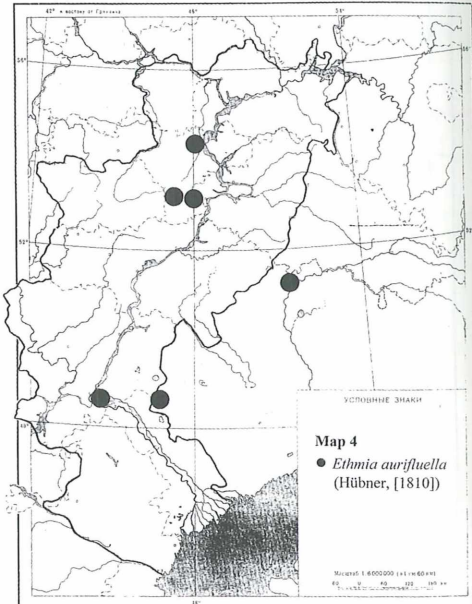
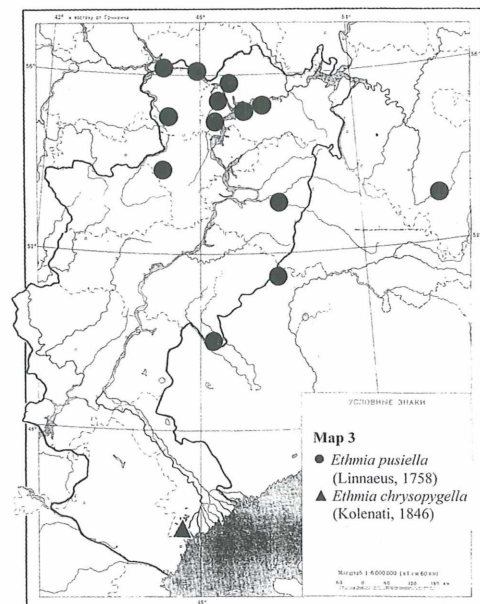
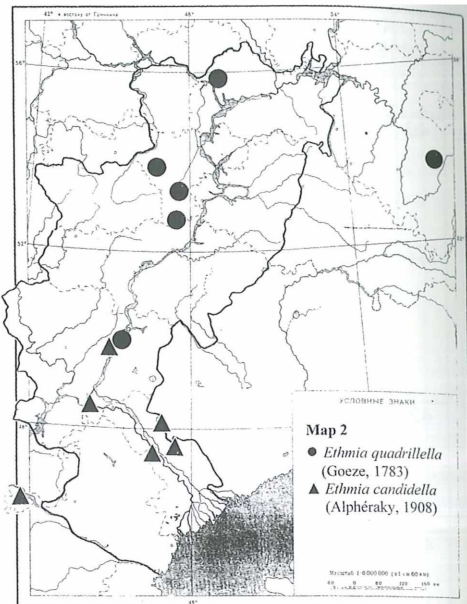
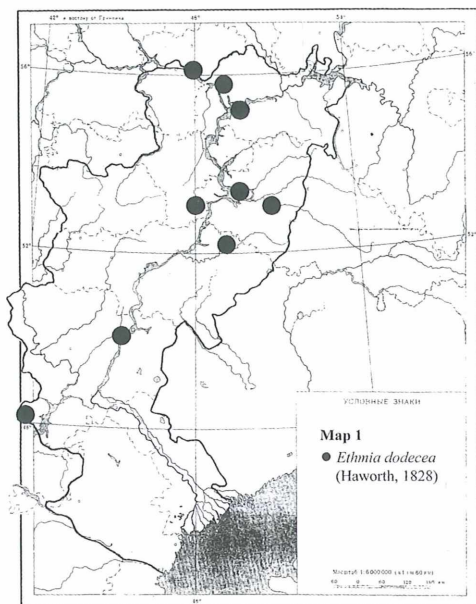
		-	-	-	-	-	-	-	-	-	Yaroslavl. We have no material in our disposal. L.: <i>Helianthemum</i> , <i>Thymus</i> .
2	<i>Scythris bengtssoni</i> PATO KA & LIŠKA, 1989	-	-	-	-	-	-	-	-	mVI-VII in 1G	Is known from Chelyabinsk Area, Arkaim reserve near vill. Amurskiy and Moskovo (NUPPONEN & al., 2000); has to be found in the region under consideration. Steppe biotopes. L.: unknown.
3	<i>Scythris flavilaterella</i> (FUCHS, 1886)	-	-	-	+	+	+	+	-	mVI-bVII	Also noted from Chelyabinsk Region by NUPPONEN & al., 2000 and from Penza (Ak-huny) by BOLSHAKOV & al., 2004. Steppe biotopes. Comparatively rare and local. L.: unknown.
4	<i>Scythris obscurella</i> (SCOPOLI, 1763)	+	-	-	+	+	+	+	+	m-eVI in 1G	Common in dry meadows. Noted by E. as <i>Butalis Glabrella</i> EvM. (= <i>esperella</i> HBN. sensu Ev., 1844: 586) L.: <i>Cerastium</i> .
5	<i>Scythris perlucidella</i> K. & T NUPPONEN, 2000 (= <i>Scythris zolotuhini</i> SATSHKOV, 2000 )	-	-	-	-	-	+	+	-	eV in 1G	LT: Russia, Orenburg Area, 6 km W vill. Donskoje. LT for <i>zolotuhini</i> : Uljanovsk Region. In calcareous steppe slope. Very rare and locally. L.: unknown.
6	<i>Scythris limbella</i> (FABRICIUS, 1775) (= <i>chenopodiella</i> HÜBNER, [1813])	-	+	+	+	+	+	+	-	mVI-mVII; VIII in 2G	Comparatively rare in dry, stepped meadows and anthropogenic landscapes. L.: <i>Chenopodium</i> , <i>Atriplex</i> .
7	<i>Scythris elenae</i> K. NUPPONEN, 2000	-	-	-	-	-	-	-	-	bVI in 1G	LT: Russia, Orenburg Area, 6 km W vill. Donskoje. In steppe, extremely hot and dry steppe slope with <i>Artemisia austriaca</i> as a dominant plant. L.: unknown.
8	<i>Scythris setiella</i> (ZELLER, 1871) (= <i>rectella</i> STAUDINGER, 1871)	-	-	o	?	-	+	+	-	VI-bVII in 1G	Very rare in dry and sandy steppes. Also noted from Chelyabinsk Region by NUPPONEN & al., 2000. LT for both taxa: Sarepta. L.: unknown.
9	<i>Scythris emichi</i> (ANKER, 1870)	-	-	+	-	-	+	+	-	eVI-mVII	Very local and rare in chalk and sandy steppes. Also noted from Chelyabinsk Region by NUPPONEN & al.,

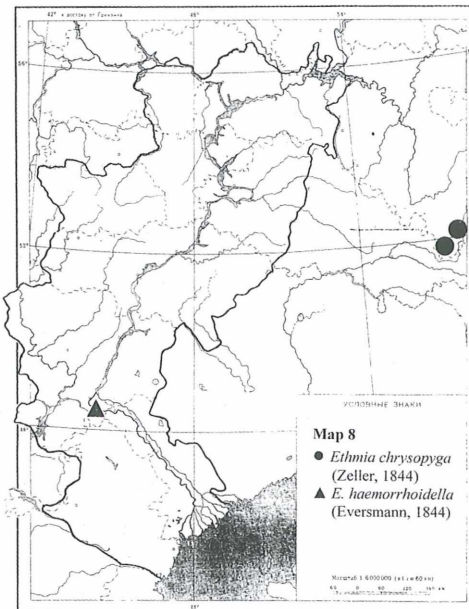
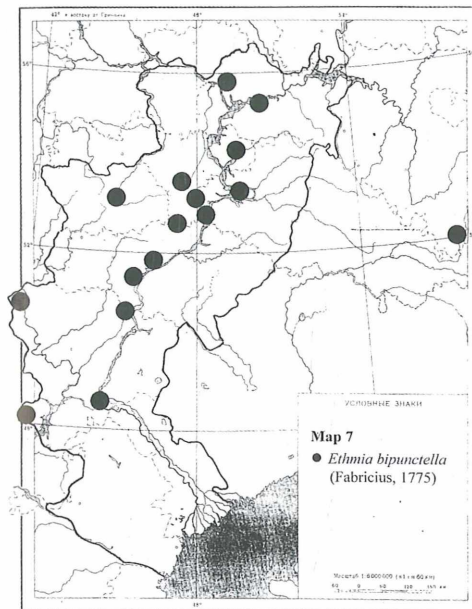
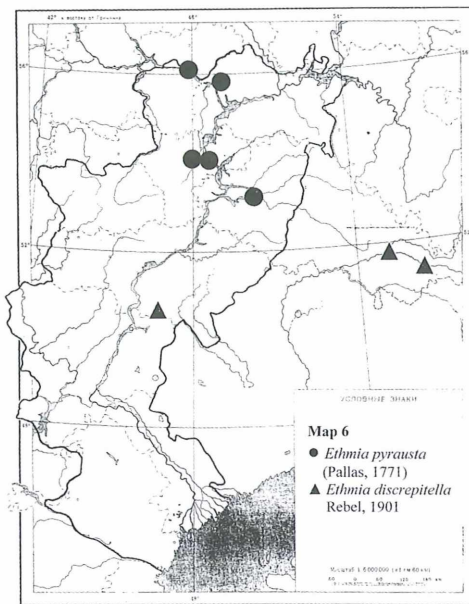
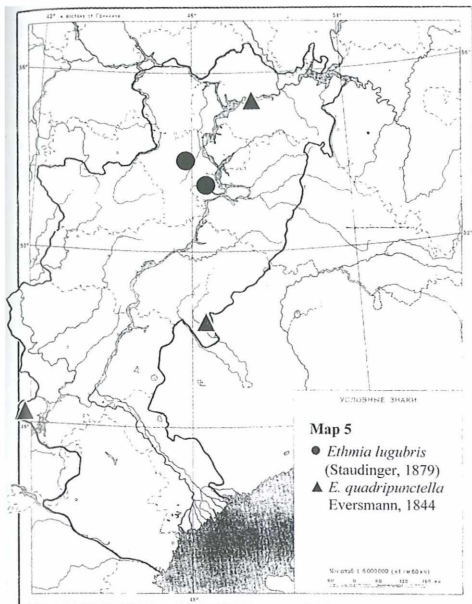
											2000. L.: <i>Gypsophila fastigiata</i> .
10	<i>Scythris bifissella</i> (HOFMANN, 1889)	-	-	-	-	-	+	-	-	eV- mVII	Very rare and local in dry steppes. Also noted from Chelyabinsk Region by NUPPONEN & al., 2000. L.: unknown.
11	<i>Scythris aegrella</i> K. NUPPONEN & JUNILAINEN, 2000	-	-	-	-	-	-	-	-	VI in 1G	LT: Russia, Orenburg Area, 8 km E Novoiletz. In lowland <i>Artemisia</i> steppe in the zone where the steppe changes to a wet meadow. L.: unknown.
12	<i>Scythris pudorinella</i> (MÖSCHLER, 1866)	-	-	0	+	-	+	-	-	eV- bVI in 1G	Rare in dry steppes. Also noted from Chelyabinsk Region by NUPPONEN & al., 2000. LT: Sarepta. L.: unknown.
13	<i>Scythris subaerariella</i> (STANTON, 1867)	-	-	-	-	-	-	-	-	mVI in 1G	Is known from Orenburg region (NUPPONEN & al., 2000); has to be found in the region under consideration. L.: unknown.
14	<i>Scythris satyrella</i> (STAUDINGER, 1880)	-	-	+	-	-	-	-	-	?	No material in our disposal. Noted from Sarepta by BENGTSOON (1997: pl. 4, fig. 17). L.: unknown.
15	<i>Scythris clavella</i> (ZELLER, 1855)	-	+	0	+	+	+	+	-	eV- mVII in 1- ?2G	Very often in various opened landscapes. LT: Sarepta. L.: <i>Helianthemum nummularium</i> .
16	<i>Scythris productella</i> (ZELLER, 1839)	-	-	+	+	+	+	-	-	b-mVI in 1G	Comparatively rare in dry meadows. Also is noted from Chelyabinsk Region by NUPPONEN & al., 2000. L.: <i>Origanum</i> (Bengtsson, 1997).
17	<i>Scythris sinensis</i> (FELDER & ROGENHOFER, 1875)	-	-	-	+	+	+	-	-	IV-VI; VIII-IX in 2G	Not rare but very locally in dry opened places including anthropogenic landscapes. L.: <i>Chenopodium album</i> .
18	<i>Scythris anomaloptera</i> (STAUDINGER, 1880)	-	-	-	-	-	+	-	+	mV- bVI in 1G	Very rare and local in dry steppes. L.: unknown.
19	<i>Scythris flaviventrella</i> (HERRICH-SCHÄFFER,	-	-	-	-	-	+	+	-	V- mVII	Not rare but local in dry steppes and meadows.

	1855)									in 1G	Also noted from Chelyabinsk Region by NUPPONEN & al., 2000. L.: <i>Vicia</i> .
20	<i>Scythris cretacella</i> K. & T NUPPONEN, 2000	-	-	-	-	-	-	-	-	bVI in 1G	LT: Russia, Orenburg Area, 20 km S vill. Pokrovka. In wide <i>Artemisia austriaca</i> steppe. Has to be found in the region. L.: unknown.
21	<i>Scythris inspersella</i> (HÜBNER, [1817])	-	-	-	+	-	-	-	-	eVII-bVIII in 1G	Very rare and local in meadows. L.: <i>Epilobium angustifolium</i> .
22	<i>Scythris noricella</i> (ZELLER, 1843)	-	-	-	-	-	-	-	-	VI-bVIII in 1G	Noted by KRULIKOWSKY (1908) from Kazan. We have no fresh material. L.: <i>Epilobium angustifolium</i> .
23	<i>Scythris inertella</i> (ZELLER, 1855) (= <i>gurdella</i> CHRISTOPH, 1877)	-	-	?	?	-	-	-	-	?	We have no material in our disposal. L.: <i>Atriplex</i> .
24	<i>Scythris gozmanyi</i> PASSERIN D'ENTRÈVES, 1986	-	-	-	-	-	+	+	-	mVI-mVII	Rare and very local in calcareous steppes. Also noted from Chelyabinsk Region by NUPPONEN & al., 2000. L.: unknown.
25	<i>Scythris disparella</i> (TENGGSTRÖM, 1848)	-	-	-	-	-	+	-	-	bVII in 1G	Steppe biotopes. Is known from Chelyabinsk Area, Berlin (NUPPONEN & al., 2000); has to be found in the region under consideration. L.: unknown.
26	<i>Scythris laminella</i> ([DENIS & SCHIFFERMÜLLER], 1775)	-	-	-	-	-	-	-	-	VI in 1G	Noted by KRULIKOWSKY (1908) for Kazan. We have no material. L.: <i>Rhytidadelphus squarrosus</i> , <i>Hieracium pilosella</i> .
27	<i>Scythris braschiella</i> (HOFMANN, 1898)	-	-	-	-	-	-	-	-	mVII in 1G	Steppe biotopes. Is known from Chelyabinsk Area, Moskovo (NUPPONEN & al., 2000); has to be found in the region under consideration. L.: <i>Armeria maritima</i> .
28	<i>Scythris mikkolai</i> SINEV, 1993	-	-	-	+	+	+	-	-	VII in 1G	Comparatively rare in dry meadows. L.: unknown.
29	<i>Scythris karinupponeni</i> BENGTSOON, 2000	-	-	-	-	-	-	+	-	VII in 1G	LT: Russia, Cheljabinsk oblast near by Moskovo. In forest steppe and open steppe habitat.

30	<i>Scythris sublamina</i> K. & T. NUPPONEN, 2000 (= <i>xerostepella</i> SATSHKOV, 2000; = <i>mediovolgensis</i> SATSHKOV, 2000)	-	-	-	-	+	+	-	-	eV- mVI: mVIII in 2?G	Very rare in steppe biotopes. In lowland <i>Artemisia</i> steppes, preferably close to wet vege- tation. LT: Russia, Orenburg Area, 20 km S Mednogorsk. LT for <i>xerostepella</i> and <i>me- diovolgensis</i> : Gryzly of Sam- ara Area. L.: unknown.
31	<i>Scythris palustris</i> (ZELLER, 1855) (= <i>mattiace</i> RÖSSLER, 1866)	-	-	-	?	-	-	-	-	?	No material in our disposal. L.: hostplant in the region is unknown.
32	<i>Scythris tributella</i> (ZELLER, 1847)	-	-	-	+	-	+	-	-	VI in 1G	Not rare but local in steppes. Also noted from Chelyabinsk Region by NUPPONEN & al., 2000. L.: probably <i>Coronilla varia</i> .
33	<i>Scythris luxatiella</i> K. NUPPONEN & KAITILA, 2000	-	-	-	-	-	-	-	-	eVI- bVII in 1G	On dry spots with low vegeta- tion. LT: Russia, Orenburg Area, Troitzkiy reserve near vill. Berlin. L.: unknown.
34	<i>Scythris ericetella</i> (HEINEMANN, 1872)	-	-	-	-	-	-	-	-	mVII in 1G	Is known from Chelyabinsk Area, Moskov (NUPPONEN & al., 2000); has to be found in the region under considera- tion. L.: <i>Calluna vulgaris</i> , <i>Erica</i> .
35	<i>Scythris grandipennis</i> (HAWORTH, 1828)	-	-	-	-	-	-	-	-	VI-VII in 1G	Noted by KRULIKOWSKY (1908) for Kazan. We have no material. L.: <i>Ulex</i> , <i>Genista</i> .
36	<i>Scythris kasyi</i> HANNEMANN, 1962	-	-	-	-	-	+	+	-	mVI in 1G	Very local and rare in sandy steppes. Is known also from Baimak (NUPPONEN & al., 2000). L.: unknown.
37	<i>Scythris eversmanni</i> K. & T. NUPPONEN, 2000	-	-	-	-	-	-	-	-	eV- mVI in 1G	LT: Russia, Orenburg Area, 6 km W vill. Donskoje. In hot, gravelly spots with sparse vegetation in steppes. L.: unknown.
38	<i>Scythris fallacella</i> (SCHLÄGER, 1847)	-	-	-	-	-	-	-	-	VII in 1?G	Noted by KRULIKOWSKY (1908) from Kazan. We have no material. L.: <i>Helianthemum</i> .
39	<i>Scythris remexella</i> K. NUPPONEN & KAITILA, 2000	-	-	-	-	-	+	-	-	eIV- mVII in 1G	On dry, hot lowland steppes with <i>Artemisia austriaca</i> . LT: Russia, Orenburg Area,

	(= <i>verae</i> SATSHKOV, 2000)											12 km SE vill. Kuvandyk. LT of <i>verae</i> : vill. Vyazovka in 160 km S of Ulyanovsk. L.: unknown.
40	<i>Scythris albisaxella</i> K. & T. NUPPONEN, 2000	-	-	-	-	-	-	-	-	VI in 1G		LT: Russia, Orenburg Area, 20 km S vill. Pokrovka. In wide <i>Artemisia austriaca</i> steppe. L.: unknown.
41	<i>Scythris arkaimensis</i> BENGTSOON, 2000	-	-	-	-	-	-	+	-	eV- bVI in 1G		Very rare and local in steppe habitat. LT: Russia, Chelyabinsk Area, Arkaim reserve near vill. Amurskiy. L.: unknown.
42	<i>Scythris acipenserella</i> K. & T. NUPPONEN, 2000	-	-	-	-	-	-	-	-	eVI in 1G		LT: Russia, Orenburg Area, 20 km S vill. Pokrovka. In large <i>Artemisia austriaca</i> steppe. L.: unknown.
43	<i>Scythris brunneofas- ciella</i> K. NUPPONEN & JUN- NILAINEN, 2000	-	-	-	-	-	-	-	-	b-mVI in 1G		LT: Russia, Orenburg Area, 20 km S vill. Pokrovka. On hot, southern slopes with very sparse vegetation. L.: unknown.
44	<i>Scythris olschwangi</i> K. & T. NUPPONEN, 2000	-	-	-	-	-	-	-	-	bVI in 1G		LT: Russia, Orenburg Area, 20 km S vill. Pokrovka. In wide <i>Artemisia austriaca</i> steppe. L.: unknown.
45	<i>Parascythris muelleri</i> (MANN, 1871)	-	-	-	-	-	-	-	-	mVI in 1G		Is known from Chelyabinsk and Orenburg Regions (NUP- PONEN & al., 2000); has to be found in the region under consideration. L.: unknown.
46	<i>Eretmocera medinella</i> (STAUDINGER, 1859)	-	+	-	+	-	-	-	-	m-eVI in 1G		Also is known from Orenburg region (NUPPONEN & al., 2000). L.: <i>Suaeda</i> .
		1	3	8	13	8	21	8	1			
	Total	7	6	15	21	13	28	12	6			





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